SCIENCE LIBRARIAN 2.0: GET A SECOND LIFE?!

Elizabeth Connor, MLS, AHIP
Associate Professor, Daniel Library
The Citadel
171 Moultrie Street
Charleston, South Carolina 29409 USA
elizabeth.connor@citadel.edu

Abstract: Some librarians have viewed the Web 2.0 phenomenon as a call to action for understanding, connecting, and collaborating with present and future generations of clientele and colleagues. Others have dismissed the use of these tools in library settings (Library 2.0) as meaningless hyperbole. This paper focuses on ways science librarians can modify and transform service approaches by using peer production, syndicated content, tagging, podcasting, and social networking; explains the barriers and benefits of using Library 2.0 tools to share and enhance scientific content; and offers practical Web 2.0 ideas, activities, and examples that can be used to engage marine biology clientele in a variety of situations and settings.

Keywords: Libraries and the Internet; Telecommunication in libraries; Libraries and community; Libraries—Information technology; Electronic reference services (Libraries); Online social networks; Blogs; RSS feeds; Wikis (Computer science); Podcasting

Introduction

Web 2.0 is a phenomenon that has taken hold in libraries, particularly in the public library sector, and has implications for science librarians involved in a variety of teaching and learning activities.

Because some of the tools associated with this phenomenon have been used for quite some time and may be commonly known, the significance of Library 2.0 as a paradigm shift may be lost on some librarians, particularly in the sciences (Connor 2007 a,b).

Meredith Farkas (2006) defines Library 2.0 in terms of usability, interoperability, and flexibility as evident in user participation in building and enhancing content. Different definitions abound in the literature but in the simplest of terms, Web 2.0 is the read/write Web.

Librarians can build on their understanding of read/write Web rights with tools that support peer production and participation. The underlying thread in Library 2.0 is trust, and letting go of perfection.
The initial promise of the Internet was to push content development to the bottom but in some organizations, layer upon layer of bureaucracy prevent scientists and librarians alike from developing or editing the simplest files on their own.

How can librarians, particularly in the sciences, modify and transform services by using these tools? Several approaches in particular can be used in science settings, including peer production, social networking, virtual worlds, mashups, and syndicated content.

Peer Production
In this case, peer production means letting a wider range of people develop content for blogs or wikis (see Figure 1), or allowing user comments/reviews for content developed by an organization.

For example, the Daniel Library at The Citadel developed a wiki prototype related to faculty publications, and another wiki that replicates Knob Knowledge, a knowledgebase used by military cadets to answer questions about the history of the institution.

Social Networking
Social networking as applied to science is evident at Nature Network. Its intention is to "help scientists connect with like-minded researchers, conduct online discussions, showcase their work via personal home pages, share information with groups…. and tag content" (Nature Network 2007). Librarians have ventured into social networking sites such as Facebook and MySpace (Webb 2007). See Figure 2 for examples of social networking sites developed by librarians.

Virtual Worlds
The concept of "third place" has been used to describe a library as a refuge from home, your first place, or work, your second space. Tools associated with Web 2.0 allow librarians to get creative about the library's presence, physically or virtually.

Second Life is a three-dimensional virtual world created by its inhabitants. Some academics remain unconvinced about the value of designing or inhabiting real estate for this virtual world in addition to providing day-to-day services that support educational endeavors (Bugeja 2007). IBM, for example, has outlined rules of engagement for employees venturing into such worlds as part of their work responsibilities (Brodkin 2007). Figure 3 lists some examples of possible interest to scientists and science librarians.

Mashups

Mashups are clever and often seamless combinations of applications or content into one interface. Google News is an example of a mashup.

Library examples include two developed by the Marine Biological Laboratory at the Woods Hole Oceanographic Institute (Sarkar 2007). The first is uBio Portal <http://portal.ubio.org/> which allows users to search Web content such as journal literature, images, and protein/nucleotide data in one cleanly designed interface. A second mashup developed at Woods Hole is called Literature and Sequence Retrieval or LitSeqR. Its purpose is to improve search retrieval related to molecular data. Librarians interested in learning more about mashup creation can consult Yahoo Pipes <http://pipes.yahoo.com/pipes/> or <http://www.mashupcamp.com/>. Ask.com is a perennial favorite search engine among undergraduates but its recent revamping has implications for how library catalogs and meta-search results can be designed and displayed. Figure 4 includes some mashup examples.

Syndicated Content

Librarians can use feed readers or aggregators to get regular updates such as headlines, tables of contents, new blog postings, podcasts, and much more (Hart 2007). Updated library site content can be read directly from a library site or pushed out to interested parties. University of Saskatchewan Library, for example, developed a handy page that points to journal RSS feeds. Figure 5 lists other examples of text and audio content that can be syndicated.

Conclusion

As with any new technological approach, barriers may include time, generational issues, firewalls, and relevance. Some aspects of these Web 2.0 tools may seem threatening or superfluous but in the recent past, this author recalls being unconvinced that Amazon could fill a need and make a profit by selling used books. First introduced in 2000, the idea of selling used books online immediately drew protests from The Authors Guild. By 2005, it was estimated that Amazon increased its profits by more than $65 million yearly

from providing an interface for others to sell used books. If you have not done so already, try out two or three new ideas before the end of the year:

- consider using blog or wiki technology to replace a static staff intranet, or to connect with users, near and far
- syndicate updated library content (text, audio) through the use of RSS or Atom feeds
- sign up for a free RSS reader account and get updates from various libraries that you admire, perhaps your peer institutions
- add book jackets to the OPAC or acquisitions list; invite users to write comments or reviews

Librarians in other sectors of the profession (Hastings 2007; Mackenzie 2007) have used various staff development approaches to prepare their co-workers and colleagues to understand and embrace the implications of Library 2.0. Science librarians can open up avenues for conversation and collaboration by embracing the changes represented by Science Librarian 2.0, understanding how learning and peer production take place in an organization, and continuing to make physical and virtual visitors feel understood and welcome, especially in our busy first lives.

References

Brodkin, J. 2007. "IBM Tells Employees to Behave in Second Life." *Network World*. [Online]. Available: http://www.networkworld.com/community/node/17920. [Accessed: 19 October 2007]

Bugeja, M.J. 2007. "Second Thoughts About Second Life." *The Chronicle of Higher Education* [Online]. Available: http://chronicle.com/weekly/v54/i03/03c00101.htm. [Accessed: 19 October 2007]

Connor, E. 2007. "Medical Librarian 2.0." *Medical Reference Services Quarterly* 26(1): 1-15.

Connor, E. 2007. "Library 2.0: Implications for the Future of Medical Libraries." *Medical Reference Services Quarterly* 26(Supplement 1): 5-23.

Farkas. M. "Label 2.0" Available: http://meredith.wolfwater.com/wordpress/index.php/2006/01/06/label-20/. [Accessed: 19 October 2007]

Hart, L.G. 2007. “RSS Feeds Create Added Value for Special Libraries.” *Information Outlook* 11(8): 27-9.

Hastings, R. 2007. “Journey to Library 2.0: One Library Trains Staff on the Social Tools Users Employ.” *Library Journal* 132(7): 36-7.

Mackenzie, C. 2007. “Creating Our Future: Workforce Planning for Library 2.0 and Beyond.” Edited version of a paper presented at the PLA/Public Libraries SA conference Adelaide 7 August 2007. [Online]. Available: http://www.pla.org.au/Conf2007/papers/Creating_our_Future.pdf. [Accessed: 19 October 2007]

Nature Network: Social Networking for Scientists. 2007. [Online]. Available: https://blogs.princeton.edu/mt/mt-tb.cgi/2198. [Accessed: 19 October 2007]

Sarkar, I.N.; Leary, P.; & Norton, Cathy N. 2007. “A Customizable ‘Mash-Up’ for Model and Disease Organisms.” Medical Library Association Annual Meeting, 2007.

Webb, P. 2007. “Prevailing Practices for Libraries on MySpace.” *College & Undergraduate Libraries* 14(2): 39-44.

Figures

Figure 1. Examples of Peer Production

MarineBio Blog
http://marinebio.org/blog/

What’s Your Ecotype
http://whatsyourecotype.blogspot.com/

National Geographic Channel Blog
http://ngcblog.nationalgeographic.com/ngcblog/

Science Library Pad
http://scilib.typepad.com/science_library_pad/

Biology Library Blog – Princeton University

http://blogs.princeton.edu/BiologyLibrary/

BiblioDAWG
http://library.citadel.edu/wordpress/

DavisWIKI – Bodega Marine Laboratory
http://daviswiki.org/Bodega_Marine_Laboratory

Fishery Management – a Wikia Wiki
http://fisherymanagement.wikia.com/wiki/Main_Page

Faculty Publications Wiki – The Citadel
http://itsweb.citadel.edu/wiki/index.php/Faculty_Publications_Wiki

Knob Knowledge Prototype
http://itsweb.citadel.edu/wiki/index.php/Knob_Knowledge_Prototype

Figure 2. Examples of Social Networking

Brooklyn College Library
http://www.myspace.com/brooklyncollegelibrary

Friends: Social Networking Sites for Engaged Library Services
http://onlinesocialnetworks.blogspot.com/

Libraries on MySpace
http://groups.myspace.com/index.cfm?fuseaction=groups.groupProfile&groupID=102987824

Figure 3. Examples of Virtual Worlds

NOAA'S Virtual Island
http://www.youtube.com/watch?v=is8YX32GAyQ

Jeff Barr's Blog >>Second Life Tour: The NOAA/ESRL Virtual Island
http://www.jeff-barr.com/?p=865

NOAA's Virtual World - NOAA Earth System Research Laboratory
http://www.esrl.noaa.gov/outreach/sl/

http://slurl.com/secondlife/Meteora/177/161/27/

Educational Uses of Second Life
http://sleducation.wikispaces.com/educationaluses

HealthInfo Island
http://infoisland.org/health_info/

Figure 4. Examples of Mashups

Google News
http://news.google.com/

uBio Portal
http://portal.ubio.org/

Ann Arbor District Library
http://www.aadl.org/

Figure 5. Examples of Syndicated Content
RSS Feeds
University of Saskatchewan Library
http://library.usask.ca/ejournals.rss_title/A

Bloglines
http://www.bloglines.com/

New Titles in the Library Catalogue – Bond University
http://www.bond.edu.au/library/find/new.html

Podcasts
Cephalpodcast.com
http://cephalopodcast.com/

Science and the Sea
http://www.scienceandthesea.org/